

place in our hands too light an apparatus producing cheaper force. Thus, the discovery of Mr. Boutignies, which, it is thought, will permit the construction of boilers of a very little weight compared to those now in use, and giving dry steam, compressed air cylinders, machines put in motion by electricity, &c., all these inventions, which it is not unreasonable to expect will be brought one of these days to a practical form, must be laid aside as long as we stick to the principle of weight for adhesion.

Mr. Love concludes with the observation that it is very seldom that an idea, however good, comes to a shape useful to industry as long as it remains in the hands of theoretical men. Thus, steam would still lie asleep and useless in Papin's Digester, if practical men had not taken it from the hands of the most learned people. What has occurred for steam will no doubt be again the case for electricity. Up to-day this powerful fluid has only been studied in cabinets of physics, and for a long period of time the only things that have issued from that source are the electric telegraph and a great number of scientific playthings. The time is not far off when the highly interesting problem will be solved,—shall electricity take the place of steam?

THE CLASSIFICATION OF MEDIEVAL ARCHITECTURE.

I AM unwilling, not being one of the principals in the discussion of this subject, which has appeared in your columns, to make unreasonable claims upon your valuable space; but the subject is to me one of so much interest that I cannot refrain from offering a few remarks arising from Mr. Sharpe's last communication, in which, by the way, I will endeavour to be less complimentary and more specific than in my last.

As in all such questions the honour of precedence is of some little value, my first object shall be to correct two misapprehensions upon that head. Of the two leading systems of classifying *Pointed* Architecture, the three-fold division is popularly attributed to Mr. Rickman, and the four-fold to Mr. Sharpe. To neither of these gentlemen, however, does the honour of precedence justly belong, though to each is to be attributed much credit for placing their several systems in a popular and generally intelligible form.

I am not sure what is the date of the first edition of Mr. Rickman's "attempt," but it was certainly anticipated by several years, both in its classification and even, in some degree, in its nomenclature, by a work now little known, and whose author, though still living, has never, that I am aware, attempted to vindicate his claims of precedence, but has, with singular modesty, allowed them to be made to one who at a later period erected so far more perfect a superstructure upon his foundation. I refer to the "Description of the Cathedral Church of Ely," by the Rev. George Millers, then minor canon and sacrist, now registrar of that cathedral. This work, of which the second edition was published in 1805, divides the entire range of English architecture into five "Ages," viz., "Saxon," "Norman," "Early English," "Ornamented English," "Florid English." We have here Rickman's divisions, and almost Rickman's nomenclature; the only real difference being in the last term, "Perpendicular" being Rickman's own. Mr. Millers, however, having formed his ideas almost exclusively from the study of his own cathedral, was led into two rather serious errors; the one from his adoption of the opinion of Bentham and others as to the supposed remains of the Saxon Conventual Church, which led him utterly wrong as to the characteristics of Saxon architecture; the other from imagining that the flowing windows to the sides of the six eastern bays of the cathedral, which were copied in the fifteenth century from the adjoining work of Bishop Hotham, were veritable specimens of the style of their age: this led him to extend his "Ornamented English" Age far beyond its proper limits, an error very excusable in so early an attempt at classification, and affecting in no degree his claim of precedence.

I will next claim for my friend Mr. Freeman the honour of precedence over Mr. Sharpe as to the four-fold division. Mr. Sharpe, it is true, disclaims all credit for originality, but still says, "I was, I believe, the first in my paper on the Geometrical Period, read at the Lincoln meeting of the Archaeological Institute, in July, 1848, and published the same month in *THE BUILDER*, to propose publicly the formal adoption of this new classification;" and he then says that, "in 1849 we find Mr. Freeman" (in his "History of Architecture"), "evidently unconscious of my earlier proposition, suggesting an exactly similar fourfold division as subordinate to a higher twofold division." Now, Mr. Sharpe does not seem to be aware that Mr. Freeman first brought forward his two-fold, and subordinately four-fold, division, in a paper read before the Oxford Society, in November, 1845. I have not that paper at hand, but I well remember reading it with great interest, as well as the long discussion which arose from it in the *Ecclesiologist*. In a letter, written by Mr. Freeman to the last-named publication, and dated April 3, 1846, the system is distinctly enunciated. In it, he advocates primarily the twofold, and secondarily the fourfold division in the clearest terms, and even states that a paper had been read by Mr. Cox, in which he "entirely adopted" this division: he asserts that "on philosophical principles the unity of the Decorated style falls to the ground,"—that "no such broad change in principle separates the Lancet from the Geometrical, or the Flowing from the Perpendicular, as divides pure Geometrical from pure Flowing;" and he yet more distinctly says, "I reckon then two great divisions of Gothic, each subdivided into two classes; and these four styles I would call Lancet, Geometrical, Flowing, and Perpendicular."

Among my own papers I find a copy of a letter I wrote to Mr. Freeman, in August, 1846, in which I agree to his divisions in the sense, not admitted by himself, of thinking the Geometrical "the termination of the ascending scale," and the Flowing as "the beginning of the descent," and I express my opinion that the point which divides these styles, "however indistinct, is the most important era in the whole history of Pointed Architecture." It is curious enough that this letter contains in its margin nearly the same circular diagram suggested in Mr. Sharpe's last communication. When two years later I saw Mr. Sharpe's drawings at Lincoln (I missed the pleasure of hearing his paper) I naturally took it for granted that he had taken his system from Mr. Freeman.

I think Mr. Sharpe hardly does justice to himself or his subject when he argues that, because our architecture "was in a constant state of progress or transition," its divisions must necessarily be arbitrary; that these divisions must be viewed rather as *periods* than as *styles*; and that of these periods the middle portions are equally transitional with the extremities.

If the divisions are simply arbitrary, why so much discussion as to whether they should be three or four? If they are mere "periods," why divide them so unequally as 70, 55, 45, and 190 years? The answer is obvious: viz., that we perceive four distinct phases of "style" prevailing through perfectly unequal periods, and consequently that, though both "styles" and periods, they are much more distinctly the former than the latter; and if so, it is manifest that their central portions are by no means transitional in the sense in which that term may be applied to their extremities.

An apt illustration of this may be found in the prismatic colours. They, as our Gothic architecture, are in a constant state of transition; but does this disprove the existence of three primary colours,—does it make the subdivision wholly arbitrary,—or does it prove that red, blue, and yellow are as transitional as purple, green, and orange? It is quite clear that a constant state of "progress or transition" is not inconsistent with the periodical appearance of pure and distinct types, which, though parts of a general system of

transition, are not in their own nature transitional. Mr. Sharpe's "transitional period" is unquestionably such *par excellence*, as being that between two distinct classes of art, instead of being only between the different phases of the same art; but I contend that, though less marked, the passing of the divisions of Pointed architecture into each other are equally transitional with that of Romanesque into Pointed.

I think Mr. Sharpe's reply to my suggested difficulty arising from foreign examples the only satisfactory one which could be made; and having practically held with the fourfold division ever since its first enunciation by Mr. Freeman, I must thank Mr. Sharpe for having, by simply cutting the knot, removed the only misgiving I had.

I believe, though in a minor degree, a similar division exists in foreign examples, and I hope that this may be worked out in detail by some competent hand. Certainly the absence or presence of the curve of contraflexure is, even abroad, the great distinction between early and late examples, though abroad it is seen only or chiefly in minor parts, as cuspiogs, &c., rather than in leading lines. Possibly, then, foreign Pointed architecture, like our own, may eventually be divided into four classes, and if so, we may, which is most desirable, agree upon one general system, though, perhaps, only numerical, applying to all, but at the same time have for each country a concurrent national nomenclature, descriptive of its own series of changes. The French system, and that of the *Ecclesiologist* would do for the former, were they four instead of three-fold; and for the present, by dividing the "Secondaire," or "Middle Pointed," into "Early and Late," they may for convenience be used concurrently with more precise national classifications.

What I have said I will recapitulate thus briefly:—

1stly. The threefold division, usually attributed to Mr. Rickman, belongs really to Mr. Millers.

2ndly. The fourfold division advocated by Mr. Sharpe, originated with Mr. Freeman.

3rdly. That system would be more correctly described as four *styles*, or phases of style, than merely as "periods."

4thly. I would suggest its general adoption for English architecture, though I think the usual terms, "flowing" and "perpendicular," would be conveniently retained, instead of "curvilinear" and "rectilinear."

5thly. We should have, concurrently with this, distinct national systems for other countries, and one general system, even if simply numerical, applicable to all.

GEO. GILBERT SCOTT.

THE FREE GRAMMAR SCHOOL OF SAINT OLAVE'S AND SAINT JOHN'S, SOUTHWARK.

AN account of this foundation has recently been printed for private distribution by Mr. G. R. Corner, F.S.A., and contains much interesting matter, showing strikingly, amongst other things, the great increase of value which time has given to property. Mr. Corner says,—

"Henry Leeke, of the parish of St. Olave, Southwark, brewer, who may be considered as the founder of this school, by his will, dated 12th March, 2nd Elizabeth (1560),† desired to be buried in the church of St. Olave's, Southwark, of which he was a parishioner; and he bequeathed out of the rents and profits of certain houses and tenements within the precincts of St. Martin-le-Grand, which he held by virtue of a lease from the dean and chapter of St. Peter's, at Westminster, 20l. a-year, during the term of the said lease, to be distributed for certain charitable purposes by the churchwardens of St. Olave's, of which he

* As our object is to revive, and not merely to construct a history of Pointed architecture,—as our wish is not merely to chronicle the past, but to make its beauties the nucleus of present and future art, it appears to me that the varieties of style, rather than mere historical transitions of period, must necessarily form the ground-work of our nomenclature, for how can we divide our own works into "periods?"

† Proved in the Prerogative Court of Canterbury, 23rd April, 1560.